

In the Piedmont Plateau the twofold character of the district is very marked geologically. On the east side of the central watershed (Parr's Ridge) we have a sequence of highly crystalline rocks, in large part igneous in their origin, which represent the remains of a vast Archean continent, whose detritus furnished much of the material of which the Paleozoic sediments were made. On the western side of the median ridge the rocks are as yet only partly crystallized and represent the greatly folded and metamorphosed beds of early Paleozoic time. Along the western edge of this plateau, beyond the Monocacy river, is the Frederick valley composed of the blue Paleozoic limestone, in part overlain by the red sandstone and shale of Mesozoic age.

The threefold division of the Appalachian Region corresponds approximately to the threefold division in the sequence of the Paleozoic strata. The Blue Ridge and Great Valley are made of Cambrian and lower Silurian beds, in places so developed or eroded as to expose the Archean floor on which they rest; the Appalachian Mountains proper are made up of sharply folded upper Silurian and Devonian strata, each easily recognized by its characteristic life forms; while the Alleghany Mountains are mainly composed of more gently folded later Devonian and Carboniferous deposits, carrying the valuable coal seams of the Cumberland basin.

Such, in brief, is the distribution of the geologic formations in Maryland and their connection with the easily recognized types of surface configuration occurring within the state. The sequence is of remarkable completeness and of great interest on account of the many types of topography and soils which the various formations produce. In the succeeding pages the geological history of each of the three provinces—plateau, mountains and coast plain—will be traced out in more detail. A somewhat different sequence will be followed than in the preceding physiographic sketch, the Piedmont Plateau being considered first, as it is the oldest, and then in order the Appalachian Region, which is next in age, and finally the Coastal Plain, which is the youngest portion of the state. Constant reference to the geological map will be found of service in following the descriptions which will be given.